

INOZEMTSEV, I.

Coal mines and mining - History

About the "sun stone" and its heroes ("Sun stone." Vols. 1 and 2. I. Vasil'kov, M. TSeytlin. Reviewed b I. Inozamtsev.) Vokrug sveta No. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

INOZEMTSEV, I.

INOZEMTSEV, I.

Joy of discovery ("Outline history of stone." [akademik] A.E.Fersman.  
Reviewed by I.Inozemtsev). Vokrug sveta no.8:59-60 Ag '54.

(MIRA 7:9)

(Fersman, Aleksandr Evgen'evich, 1883-1945) (Stone)

INOZENTSEV, I.

According to Gor'kii's legacy. Voprug sveta no. 11:59-62 N '54.  
(Geography) (MLRA 7:11)

INOZEMTSEV, I.

~~XXXXXXXXXX~~  
Practical aids in directing readings ("Extracurricular readings in  
geography and geology in the 5th-7th classes." A.A. Iakovlev.

Reviewed by I. Inozemtsev. Vop.geog. no.37:221-224 '55.

(MLRA 8:12)

(Geography--Study and teaching) (Kolosovskii, Nikolai Nikolaevich,  
1891-1954)

*INOZEMTSY, I.D.*  
NOVIKOV, S.S.; ENGLIN, B.A.; MARYSHKINA, T.I.; SUBBOTIN, A.P.; LAPSHINA, Z.Ya;  
DOBRYNINA, T.P.; INOZEMTSY, I.D.

Investigating antiknock properties of members of the naphthene series.  
Khim. i tekhn. topl. i masel no.9:7-11 S '57. (MIRA 10:11)  
(Gasoline--Antiknock and antiknock mixtures)  
(Naphthenes)

Z/011/62/019/007/005/005  
E112/E453

AUTHORS: Lykov, M.V., Inozemtsev, I.D., Karpova, V.M.  
TITLE: Protection of petroleum tankers by anticorrosion paints  
PERIODICAL: Chemie a chemická technologie. Přehled technické a  
hospodářské literatury, v.19, no.7, 1962, 323,  
abstract Ch 62-4401. (Lakokras materialy, v.2, no.2,  
1962, 34-40)

TEXT: The resistance of surface coating materials against the  
action of liquid fuels, particularly petroleum and against  
corrosion by atmospheric effects, were investigated under  
laboratory conditions. Techniques of applying anticorrosion  
paints to the inner surfaces of the tanks and containers were  
developed, particularly for containers which have to resist the  
action of fuels and lubricants. Methods were verified by  
practical application tests. The tested materials included  
stoving enamels and air drying lacquers. A method for sand-  
blasting the inner surfaces of the containers was developed and an  
equipment for their spraying with anticorrosion paint, heated to  
Card 1/2

Protection of petroleum ...

Z/011/62/019/007/005/005  
E112/E453

elevated temperatures, is described. The composition of the coating materials is not given, but it is concluded from certain quantitative data that paints based on vinyl and phenol-formaldehyde resins were used and that they were applied to primer CHS-100. The use of resin "Etinol", prepared from a byproduct of synthetic rubber manufacture (polymers of divinyl-acetylene) also proved of advantage. 2 diagrammatic sketches, 1 diagram, 1 table, 5 literature references.

[Abstracter's note: Complete translation.]

Card 2/2

INOZEMTSEV, I. I.

USSR

"Using Groups of Peat for Cementation of Cutting  
Tools." Stanki I Instrument Vol. 15, No. 405, 1944

BR 52059019



ACC NR: AP7000672

(N)

SOURCE CODE: UR/0375/66/000/012/0074/0075

AUTHOR: Tsezarev, N. N. (Lieutenant colonel); Inozentsev, I. S. (Lieutenant colonel)

ORG: none

TITLE: Improving the equipment of floating berths

SOURCE: Morskoy sbornik, no. 12, 1966, 74-75

TOPIC TAGS: *shipbuilding* ~~marine~~ engineering, marine equipment, *service craft* ~~naval equipment, naval base, naval base~~

ABSTRACT: Floating berths consisting of 3 pontoons are considered best with respect to maneuverability and positioning while utilizing a minimum of facilities and time. It is suggested to replace the previously used concrete anchor blocks, weighing 10—50 tons, with 4 x 4 x 2.2 m metal pontoons with positive buoyancy and weighing 25—30 tons with ballast, which can easily be transported and submerged by filling with water. Instead of the presently used demountable connecting bridges, structures with floating supports are suggested. The suggestions will make it possible to position floating berths in a minimum of time and without the help of such facilities as floating cranes and hulks. [CE]

SUB CODE: 13/ SUBM DATE: none

Card 1/1

UDC: none

INOZEMTSIV, I.V.

Popular science novels of V.A.Obruchev. Vop.geog. no.35:321-327 '54.  
(Obruchev, Vladimir Afanas'evich, 1863- ) (MLRA 7:12)

INOZEMPSEV, Ivan Vladimirovich; BERDNIKOVA, K.K., red.; VASIL'YEVA,  
L.P., tekhn. red.

[Alone on the ocean; a discourse on books] Odní v okeane;  
beseda o knigakh. Moskva, Gos. Biblioteka SSSR im. V.I.Lenina,  
1961. 18 p. (MIRA 15:1)

(Ocean)

INOZENTZEV, K. V.

Sergiyenko, V. A.; Ioffe, Yu. K.; Malev, V. A.; Bashilov, A. A.; Inozentzev, K. V.  
"The Fine Structure of the  $\gamma$ -Lines of RaC'"II, Iz. Leningrad Phys-Tech Inst,  
Acad Sci. 1949

G. D. Latyshev; I. F. Barchuk

COMMON ELEMENTS		COMMON VARIABLE ELEMENTS	
<p><b>INDZEMTSEV, K.V.</b></p>		<p>32</p>	
<p><b>PROCESSES AND PROPERTIES INDEX</b></p>			
<p><b>The Problem of Measurement of Magnetic Fields by a Ballistic Method. (In Russian.) K. V. Indzemtsev and G. D. Latshev. Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya (Bulletin of the Academy of Sciences of the USSR, Physical Series), v. 13, July-Aug. 1940, p. 453-455.</b></p>			
<p>Proposes solution of above problem by use of an apparatus consisting of a revolving frame in the magnetic field of the spectrograph and a ballistic galvanometer whose construction and operating parameters enter into the calculations. Apparatus is illustrated; method of use is described.</p>			
<p><b>U.S.S.R. METALLURGICAL LITERATURE CLASSIFICATION</b></p>			
<p>SECTION MAP ONLY USE</p>		<p>SECTION MAP ONLY USE</p>	
<p>SECTION MAP ONLY USE</p>		<p>SECTION MAP ONLY USE</p>	

INOZEMTSEV, M. inzhener.

Multiple use of used core mixtures. Stroi.mat., izdel.i konstr.  
1 no.11:18-19 N '55. (MLRA 9:5)

(Coremaking)

INOZEMTSEV, M.I.; TARUNTAYEV, V. Ye.

Founding

New method of preparing molds for thinwalled, deep-shelled castings. Lit. proiz., no5, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

INOZEMTSEV, N., polkovnik

German Federal Republic at a new stage of militarization.

Voen. vest. 41 no.5:117-119 My '61.

(MIRA 14:8)

(Germany, West--Defenses)



BOGOLYUBSKIY, N.; BORISOV, S.; GRIGOR'YEV, N.; GUSAROV, M.; GUSEV, L.;  
ZHAROV, S.; ZHETVIN, N.; ZALOGIN, S.; ZOLOTOV, G.; INOZEMTSEV, N.;  
KLEMENT'YEVA, A.; KOMAROV, A.; KOSMACHEV, V.; LAPTEV, V.; LOMONOSOV, V.;  
MIKHAYLOV, A.; NOVIKOV, I.; PERTSEV, M.; PROKOPOVICH, P.; ROMANOV, I.;  
RUBLINSKAYA, R.; SVIRIDOV, G.; SOTNIKOV, G.; SUBBOTIN, A.; TURTANOV, I.;  
CHESNOKOV, S.; CHICHKIN, K.; CHIKHANOV, I.

Grigori Markelovich Il'in; an obituary. Metallurg 3 no.10:36 0 '58.  
(MIRA 11:10)

(Il'in, Grigori Markelovich, 1894-1958)

INOZEMTSEV, H., inzh.

Contribution of factory scientists. Sov.profssoiuzy 7 no.15:  
10-11 Ag '59. (MIRA 12:12)

1. Issledovatel'skaya laboratoriya metallurgicheskogo zavoda  
"Svobodnyy sokol," sekretar' zavodskoy organizatsii nauchno-  
tekhnicheskogo obshchestva.  
(Steel industry)

AD Nr. 987-4 11 June

STRUCTURE OF TURBULENT FLAMES (USSR)  
*INOZEMTSEV, N.I.*

Dubrovskaya, O. N., K. P. Vlasov, and N. I. Inozemtsev. *Izv. Akademiya nauk SSSR. Otdeleniye tekhnicheskikh nauk. Energetika i transport*, no. 2, Mar-Apr 1963, 214-220.  
S/281/69/000/002/003/003

The structure of turbulent gasoline-air flames was studied at flow velocities of 25 to 150 m/sec and 0.8 to 1.8 excess air in a burner 300 mm in diameter, equipped with a conical flame holder 22 mm in diameter. Simultaneous measurements were made with an ionization gauge, a resistance thermometer, and an infrared pyrometer, and by Schlieren photography and spectrographic recording of radical emission. The results showed that the reaction takes place stepwise in sections having a length of 8-10 mm in the direction of flow. Ionization in the individual sections is 4 to 5 times less than in laminar flames, indicating a basic difference between turbulent and laminar flame mechanisms. The effect of excess air on the chemical reaction rate is less pronounced in turbulent than in laminar flames. The zone of intensive chemical reaction is preceded by a preheating zone which contains combustion products transmitted by turbulent diffusion. The maximum emission of intermediate combustion products corresponds to 82% conversion, rather than the 50% postulated by the model based on laminar flame pulsations.

[PV]

Card 1/1

ACC NR: AP7002618

(A,N)

SOURCE CODE: UR/0413/66/000/023/0134/0134

INVENTOR: Inozemtsev, N. I.; Kitayev, Yu. V.; Bykhovskiy, Kh, V.; Pechatin, A. A.

ORG: none

TITLE: .Piston reducer for an automatic aqualung. Class 65, No. 189323

SOURCE: Izobreteniya, promyshlennyye obratzay, tovarnyye znaki, no. 23, 1966, 134

TOPIC TAGS: piston reducer, aqualung, diving technology, life support equipment, respirator, underwater clothing, survival kit

ABSTRACT: An Author Certificate has been issued for a piston reducer assembly for an automatic aqualung. Fig. 1 shows the assembly. To maintain secondary pressure in the

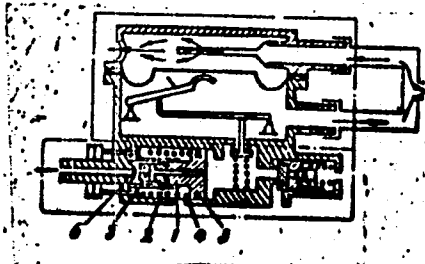


Fig. 1. Piston reducer assembly

- 1 - Differential piston;
- 2 and 3 - rubber gaskets;
- 4 - spring; 5 - seal;
- 5 - connecting pipe seat.

Card 1/2

UDC: 626.025.5

ACC NR: AP7002618

reducer chamber more accurately, a seal made of plastic is attached to the butt of the small differential piston. This seal covers the opening of the connecting pipe seat where air is introduced at high pressure. A spring prevents damage to the piston during vibration. [WA-N-67-02]

SUB CODE: 06/ SUBM DATE: 23Apr64/

Card 2/2

AUTHOR: Inozemtsev, N. N.

SOV/147-58-4-9/15

TITLE: Investigation of the Normal Velocity of the Flame Spread in the Case of the Hydrocarbon Fuels (Issledovaniye normal'noy skorosti rasprostraneniya plameni uglevodorodnykh topliv)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Aviatsionnaya tekhnika, 1958, Nr 4, pp 72-80 (USSR)

ABSTRACT: The article gives the results of the experiments carried out by the author in order to determine the influence of: the composition of the air-fuel mixture ( $\alpha$ ), the initial temperature and pressure upon the rate of spread of the flame of the following fuels: propane, benzine and kerosene. The normal velocity of the propagation of the flame was determined by employing Bunsen type burners in the apparatus whose essentials are given in Fig 1 and are as follows: 1 - pressure chamber; 2 - fuel can; 3 - indicator; 4 - burner; 5 - heater; 6 - throttle; 7 - fuel feeder; 8 - throttling valve; 10-13 - flow meters; 14-16 - pressure controls; 17 - inspection windows. The apparatus could be used at atmospheric pressure as well as with reduced pressures (partial vacuum) and permitted wide variation of the initial temperature of the fuel

Card 1/5

SOV/147-58-4-9/15

Investigation of the Normal Velocity of the Flame Spread in the Case of the Hydrocarbon Fuels

mixtures (up to ca  $500^{\circ}\text{C}$ ). The burner contained a nozzle shaped according to Vitoshynski's formula, and produced a uniform velocity field at the edge. Fig 2 (a, 6) shows the photographs of the flame (nozzle diameters 8 and 10 mm) which are seen to be right-angled cones. [Fig 2B shows the flame of a lean mixture (excess of air) and at a low pressure and its shape is no longer conical]. Hence, if  $W$  is the velocity of the mixture issuing from the burner and  $\alpha^{\circ}$  is the semi-vertical angle of the cone, the normal velocity of the propagation of the flame  $U_H$  is given by Eq (1). On the other hand, considering the volume flow of the mixture, this velocity is also given by Eq (2), where  $F_{\pi\Delta}$  - is the surface of flame cone.

Fig 3 shows the comparison of the results obtained from these two formulae plotted against the velocity of the fuel stream  $W$ . Below the values of  $W$  of 1.2 to 1.5 m/sec, Eq (2) gives rapidly falling values of  $U_H$ , while those from Eq (1) remain sensibly constant. Obviously, at the base of the flame cone there is some heat transfer from

Card 2/5

SOV/147-58-4-9/15

Investigation of the Normal Velocity of the Flame Spread in the Case of the Hydrocarbon Fuels

the flame to the walls of the nozzle and thus the flame-cone surface must be affected by this, i.e. Eq (2) is less reliable than Eq (1). Hence, it may be concluded that  $U_H$  does not depend upon  $W$ . Fig 4 shows dependence of  $U_H$  on the composition of the mixture ( $\alpha$ ) at various pressures (from 1 atm to 0.1 atm). As the pressure decreases,  $U_H$  increases according to the relation  $U_H \sim P^{-0.3}$  (if the temperature of the mixture remains constant). For  $P = 1.0$  atm the results agree with those of Refs 1 and 2. Figs 5 and 6 show dependence of  $U_H$  (benzine and air mixture) on the initial temperature and pressure for various mixture strengths ( $\alpha$  is the coefficient of the air excess) and this is summarized in Fig 7 as  $U_H = f(P)$  for the same strengths of the mixture. Following Ref 3 the dependence of  $U_H$  upon  $P$  may be expressed as:

$$U_H \sim P^{\frac{1}{2} - 1},$$

Card 3/5



SOV/147-58-4-9/15

Investigation of the Normal Velocity of the Flame Spread in the Case of the Hydrocarbon Fuels

where  $\nu$  - effective order of the reaction, and since from experiments we get  $U_H \sim P^{-m}$ , therefore  $\nu = 2-2m$ , i.e. for the benzine-air mixture we get  $\nu \approx 1.5$  to  $1.75$ . Thus, as the initial temperature of the mixture  $T_1$  increases  $\nu$  tends to 2. This shows an excellent agreement with Ref 4. Fig 8 shows the effect of the initial temperature of the mixture on  $U_H$  for various values of the mixture strength and at the same pressure (1 atm) and it is seen that as the temperature increases  $U_H$  grows more intensively. The relation may be expressed by the formula  $U_H \sim T_1^{1.8}$  ( $T_1$  in  $^{\circ}K$ ). Fig 9 shows the relation  $U_H = f(t_1)$  at  $P = 1$  atm and  $\alpha = 0.95$  for two fuels: benzine and kerosene, and compares the experimental data with the theoretical relation (Eq 1') developed by Zeldovich, Semenov and Frank-Kamenetskiy. The agreement is perfect.

Card 4/5

SOV/147-58-4-9/15

Investigation of the Normal Velocity of the Flame Spread in the Case  
of the Hydrocarbon Fuels

There are 9 figures and 5 references, 3 of which are  
Soviet, 2 English.

ASSOCIATION: Kafedra teplovykh dvigateley (Chair of Heat Engines)  
Moskovskiy aviatsionnyy institut (Moscow Institute of  
Aeronautical Engineering)

SUBMITTED: May 24, 1958

Card 5/5

VLASOV, K.P.; INOZEMTSEV, N.N.

Effect of initial parameters of a flow on turbulent flame  
velocity of homogeneous fuel-air mixtures. Izv. vys. ucheb. zav.;  
av.tekh. 2 no.1:38-45 '59. (MIRA 12:3)

1. Moskovskiy aviatsionnyy institut, Kafedra teplovykh dvigateley.  
(Combustion)

AUTHOR: Inozemtsev, N. N. S/170/59/002/10/008/020  
B115/B007

TITLE: The Influence Exerted by the Initial Temperature and by Pressure Upon the Normal Propagation Velocity of the Flame of Various Hydrocarbon - Air Mixtures

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1959, Vol 2, Nr 10, pp 52-56 (USSR)

ABSTRACT: The author already previously investigated the normal flame velocity of gasoline and kerosene (Ref 1). In the present paper the normal propagation velocities  $u_n$  of the flames of different motor fuels are compared, the dependence of  $u_n$  on pressure at various initial temperatures  $T_1$  in the heating of the mixture are precisely given, and the temperature range under investigation is extended to  $450^\circ\text{C}$ . The normal flame velocity was determined by the Bunsen burner method. The results obtained by comparing the normal velocity of flame propagation in mixtures of air with gasoline, kerosene, and T-5<sup>A</sup> (a fuel for Diesel engines with a specific weight of about 0.85) are given (Fig 1). The experimental dependence of  $u_n$  on the temperature  $T_1$  found for various fuels was compared with the theoretical values calculated.

Card 1/2

The Influence Exerted by the Initial Temperature  
and by Pressure Upon the Normal Propagation  
Velocity of the Flame of Various Hydrocarbon -  
Air Mixtures

S/170/59/002/10/008/020  
B115/B007

culated according to the theory of heat by Zel'dovich, N. N. Senenov, and Frank-Kamenetskiy. The experimentally found function  $u_n = f(t_1)$  for motor fuels is accurately determined by the theoretical temperature dependence for a bimolecular reaction according to the theory of heat (Fig 2). The dependence of the normal propagation velocity of the flame on pressure at various temperatures  $t_1$  for mixtures of gasoline with air (Fig 3) and the dependence of the normal- and of mass velocity of combustion on pressure for various initial temperatures of heating (Fig 4) is given. There are 4 figures and 6 references, 3 of which are Soviet.

(V)

Card 2/2

INOZEMTSEV, N. N., Cand Tech Sci -- (diss) "Research into ionization and the study of structural laminar and turbulent flames." Moscow, 1960. 9 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin Aviation Inst im Sergo Ordzhonikidze); 160 copies; price not given; (KL, 23-60, 124)

31303  
S/124/61/000/010/038/056  
D251/D301

11.7430

AUTHORS: Vlasov, K.P. and Inozemtsev, N.N.

TITLE: Investigating ionization in laminar and turbulent streams

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 10, 1961, 89, abstract 10 B630 (V sb. 3-e Vses. soveshchaniye po teorii gorenii, v. 1, M., 1960, 60-71)

TEXT: Experimental measuring of the ionization of propane-air and benzo-air flames was carried out by means of a diodal sensor in the form of a two-channel ceramic with fixed receiver-electrodes. The ceramic served as an insulator, the electrodes touched the particles of the flame only with their end surfaces. The ionization current was amplified by a single-valve amplifier and then applied to the intake of the amplifier of a cathode impulse oscillograph 25M (25I). The sensor was moved by hand in the flame with a velocity of 1-2 m/sec or else pneumatic streaming of the flame was appl-

Card 1/3

X

31303

S/124/61/000/010/038/056

D251/D301

Investigating ionization...

ied to the sensor with a velocity of 10-20 m/sec. The outer diameter of the ceramic was 1 mm for a laminar flame and 3 mm for a turbulent flame. The investigation showed that in all cases the speed of ionization was proportional to the speed of chemical reaction. The concentration of electrons directly behind the flame front is approximately 500 times less than in the front itself. With  $\alpha = 0.9$  and the pressure  $p = 1$  atm, the concentration of electrons in the front of a laminar flame is approximately  $2 \times 10^7 \text{ cm}^{-3}$ . In the turbulent flame a wide zone of non-equilibrium ionization was discovered, within which bumps of the ionization current occur. On increasing the pressure from the stabilizer, the breadth of this zone increases, but the height decreases. The maximum ionization in the turbulent flame is 10 times less than in the laminar flame, other conditions being equal. Detailed investigation of the ionization showed that in the turbulent flame there are no laminar fronts, self-ignition and combustion proceed within the wide zone of chemical reaction in discrete foci-moles having various dimensions. The position of the front boundary of the zone of reaction in these experiments depended

Card 2/3



Investigating ionization...

31303  
S/124/61/000/010/038/056  
D251/D301

only upon the initial parameters of flow. The authors present the turbulent flame as created from the zone of heating where there is intensive mingling of the products of combustion with the active mixture, the zone of chemical reactions, and the zone of the products of combustion with partial burning. In conclusion it is deduced that in the turbulent flame, the definitive processes are turbulent diffusion, kinetics of the chemical reactions and the temperature. [Abstracter's note: Complete translation]

Card 3/3

X

6691 69641

S/024/60/000/02/009/031  
E081/E135

11.1000

AUTHOR: Inozemtsev, N.N. (Moscow)

TITLE: Ionisation in Laminar Flames

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1960, Nr 2, pp 59-66 (USSR)

ABSTRACT: Existing methods of investigating ionisation in flames are reviewed and their limitations are pointed out. In the present paper, a method of studying flame ionisation using a two-contact gauge is described and data are obtained for hydrocarbon-air bunsen flames with different initial conditions. The two-contact gauge, supplied with constant voltage from a battery, consists of a two-channel ceramic with internally inserted steel conductor-contacts which come in contact with the ionised flame particles only at their end surfaces. The apparatus is shown in Fig 1. Fig 1a - basic circuit for measuring ionisation in flames: 1, two-contact gauge; 2, single valve amplifier; 3, semiconductor slide wire; 4, regulating resistance;  $R_m$ , measuring resistance;  $B$ , supply battery for gauge. Fig 1b - frequency characteristics of the circuit:  $B$ , amplitude

Card  
1/5

~~6601~~ 69641

S/024/60/000/02/009/031

E081/E135

## Ionisation in Laminar Flames

characteristics of the circuit; 1, input resistance of oscillograph 1:1; 2, input resistance of oscillograph 75 ohms. The linear part of the amplitude characteristic is the working region, from which the input voltage and ionisation current are determined

$$h_{\text{outp.}} \rightarrow U_{\text{inp.}}, \quad I_1 = \frac{U_{\text{inp.}}}{R_M}$$

Fig 2 shows the volt-amp characteristics of a propane-air flame: a - at the flame front (gauge diameter 1 mm,  $t_1 = 20^\circ\text{C}$ ,  $\alpha = 0.9$ ); b - in the combustion products (gauge diameter 3 mm,  $t_1 = 20^\circ\text{C}$ ,  $\alpha = 0.9$ ). For supply voltages up to 20, the current is proportional to voltage; above about 35 V saturation begins to be evident. Fig 3 shows typical oscillograms of the ionisation current and disposition for shooting through the bunsen flame: a - in the flame front (gauge diameter 1 mm,  $U_0 = 4.5\text{ V}$ ,  $R_M = 1.2\text{ Megohm}$ ); b - in the combustion products (gauge diameter 3 mm,  $U_0 = 70\text{ V}$ ,  $R_M = 49.2\text{ Megohm}$ ). Fig 4 shows the dependence of current

Card  
2/5

~~69641~~ 69641

S/024/60/000/02/009/031

E081/E135

# Ionisation in Laminar Flames

and width of non-equilibrium ionisation zone in the laminar flame front on the initial parameters of the mixture: a - propane  $t_1 = 20^\circ\text{C}$ ,  $p = 1\text{ atm}$ ,  $U_0 = 13\text{ V}$  (gauge diameter 1 mm); b - propane,  $t_1 = 20^\circ\text{C}$ ,  $p = 1\text{ atm}$ ; c - propane; d - propane and benzene ( $h \sim I \sim T_1^{0.53}$ ); e - propane,  $t_1 = 20^\circ\text{C}$ ,  $\alpha = 0.9$  ( $\delta \sim p^{-1.3}$ ); f - propane,  $t_1 = 20^\circ\text{C}$ ,  $\alpha = 0.9$  (gauge diameter 1 mm,  $U_0 = 13\text{ V}$ ,  $I \sim p^{1.3}$ ). The concentration of electrons in the front of the laminar flame for the hydrocarbons investigated and for  $\alpha \approx 0.9$ ,  $p = 1.0\text{ atm}$  and  $t_1 \approx 20^\circ\text{C}$ , is about  $2.2 \times 10^{17}\text{ l/cm}^3$ . The velocity of production of electrons in flames under normal conditions and  $\alpha = 0.9$  is equal to  $q = 17.10^{17}\text{ per cm}^3\text{.sec}$ , and it depends on pressure according to  $q \sim p^{1.93}$ . The coefficient of recombination  $\beta = 3.3 \times 10^3\text{ cm}^3\text{/sec}$  and  $\beta \sim p^{-1.7}$ . The electron concentration in the combustion products immediately behind the flame front under normal conditions is approximately  $0.47 \times 10^5\text{ per cm}^3$ , about 500 times less than in the flame front. The velocity of generation of electrons is about  $0.7 \times 10^{14}\text{ per cm}^3\text{.sec}$  and the

Card  
3/ 5

69641

S/024/60/000/02/009/031  
E081/E135

# Ionisation in Laminar Flames

coefficient of recombination  $\beta \approx 3.10^4$  cm<sup>3</sup>/sec. The width of the zone of non-equilibrium ionisation  $\delta_i$  under normal conditions and  $\alpha \approx 0.9$  is about 0.2 mm (Figs 46 and 3), and depends on the initial parameters of the mixture. It is possible to show that the velocity of electron generation in the flame front is proportional to the chemical reaction velocity as follows. The formula (1) represents the normal velocity of the flame propagation  $U_H$ , according to A.G. Prudnikov, for the case of heat evolution as a function of distance in the flame front. In this formula  $\Phi_{max}$  is the maximum heat evolution,  $\omega(c_1 T)$  is the chemical reaction velocity,  $\Phi_{max} \sim \omega(c_1 T)_{max}$ ,  $\delta_f$  is the width of the laminar flame front,  $\rho_1$  is the initial density of the mixture,  $T_1$  and  $T_2$  are the initial and final temperatures. Knowing the experimentally determined dependence of the normal velocity on the initial parameters of the mixture (Ref 6) and putting the value of  $q_{max}$  and  $\delta_i$  in (1) in place of  $\Phi_{max}$  and  $\delta_f$ , the ratio of the experimental  $U_H$  to the theoretical (k) can be

Card  
4/ 5

6964

S/024/60/000/02/009/031  
E081/E135

Ionisation in Laminar Flames  
calculated:

$$k = \frac{U_{Hc} \rho_1 (T_2 - T_1)}{\sqrt{2J} q_{max} \delta_1}$$

Fig 5 shows the value of  $k$  for various initial parameters of the mixture. The constancy of  $k$  with the change in constitution of the mixture, with pressure and initial temperature, shows that heat evolution (or reaction velocity) is proportional to the velocity of electron generation in the flame front, and since  $q \sim I$  the ionisation current is proportional to the chemical reaction velocity. There are 5 figures and 7 references, of which 5 are Soviet and 2 are English. The paper is a continuation of previous work (Ref 6).

Card  
5/5

NOTE: The quantity  $\alpha$  is not defined in the paper, but it may be the coefficient of air excess in the mixture.

SUBMITTED: September 29, 1959

80956

S/024/60/000/03/022/028  
E081/E441

26.5000

AUTHORS:

Vlasov, K.P. and Inozemtsev, N.N. (Moscow)

TITLE:

The Feasibility of Investigating the Fine Structure of Turbulent Flames by Means of the Resistance Thermometer Method

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1960, Nr 3, pp 166-170 (USSR)

ABSTRACT:

In Ref 1, a resistance thermometer was used to investigate temperature fluctuations in a turbulent flame. The sensitive element of such a thermometer consists of a fine platinum or tungsten wire. On instantaneous transferring the wire from a medium at temperature  $T_1$  the heat balance equation is Eq (1), where  $m$  is the mass of the wire,  $c$  the heat capacity and  $\alpha$  the coefficient of heat emission. The solution of Eq (1) is Eq (2), where  $T_H$  is the temperature of the wire,  $t$  is time and  $\tau$  is the time constant of the wire. This equation corresponds to a sudden change in temperature but if in a flame there is a relatively large zone with intermediate temperature, the heat balance is expressed by Eq (3) of which the solution is Eq (4);

Card 1/3

"APPROVED FOR RELEASE: 08/10/2001 S/024/60/000/03/022/028  
E081/E441

The Feasibility of Investigating the Fine Structure of Turbulent Flames by Means of the Resistance Thermometer Method

$t_0$  is the time of intersection of the front by the wire. The two solutions (2) and (3) are compared in Fig 1. (Change of relative temperature of the wire with time for various ratios of the time of intersection of the front to the time constant of the wire.) With the aid of Fig 1 and 2 (Fig 2: Determination of the errors of finding "defects") the uncertainties of the method used in Ref 1 to detect the "defects" (regions where the curve  $T_H = f(t)$  deviates from the normal exponential curve (2)) are evaluated. The determination of the mean temperature for a rectangular and a trapezoidal profile (Fig 3) is also considered. Experiments were carried out with a propane-air bunsen flame using a resistance thermometer and the apparatus described in Ref 1. Fig 4 shows some of the temperature records (oscillographic temperature records with a resistance thermometer in the cross-section of a bunsen flame at different traverse velocities  $W$ : a - tungsten wire, diameter  $15\mu$ ; b - tungsten wire, diameter  $5\mu$ )

Card 2/3

80956  
S/024/60/000/03/022/028  
EO81/E441

The Feasibility of Investigating the Fine Structure of Turbulent  
Flames by Means of the Resistance Thermometer Method

and indicates the very considerable effect of the  
traverse velocity. The effect of the time constant of  
the wire on the shape of the output wave may be shown  
by means of the circuit of Fig 5. (Fig 5: a and b -  
Input and output impulses; B - scheme of model  
arrangement, 1 - amplitude limiter, 2 - rectifier,  
3 - integrating circuit, 4 - resistive load.)  
Fig 6 shows the input and output pulses of a square and  
trapezoidal wave with a time constant  $\approx 0.5 \times 10^{-3}$  sec,  
approximately the same as that of the  $5 \mu$  diameter wire  
used in Ref 1. It is concluded that resistance  
thermometers with wire  $\approx 3 - 5 \mu$  diameter are unsuitable  
for investigating the fine structure of turbulent flames  
because they do not detect zones with intermediate  
temperature less than 6 to 10 mm in size. There are  
6 figures and 1 Soviet reference.

SUBMITTED: May 15, 1959

Card 3/3



VLASOV, K.P. (Moskva); INOZEMTSEV, N.N. (Moskva)

Possibility of using a resistance pyrometer in the investigation of  
the fine structure of a turbulent flame. Izv.AN SSSR.Otd.tekh.  
nauk.Energ.i avtom. no.3:166-170 My-Je '60. (MIRA 13:7)  
(Flame)

11.720°

AUTHOR: Inozemtsev, N. N.

TITLE: Ionization in laminar flames

PERIODICAL: Referativnyy zhurnal, Silovyye ustanovki, no. 4, 1962, 27, abstract 42.4.149. In collection "Stabilizatsiya plameni i razvitiye protsessa sgoraniya v turbulentni. potoke". M., Oborongiz, 1961, 149-170

TEXT: A laminar Bunsen flame was investigated by intersection with two contact transducers. The ionization current and the width of the high ionization zone were measured. The ion and electron concentrations, rate of electron formation and coefficient of molecular recombination were measured. It was established that the width of intense ionization at the front of the flame increases with deviation of the mixture composition from  $\alpha = 0.9$ . The ionization and normal propagation rate of the flame increase with combustion temperature. A relationship between ionization and the process of chemical reaction at the front of the flame is indicated. Proportionality between heat generation and rate of electron formation at the front of the flame was established the coefficient proportionality for hydrocarbon-air flame being  $2 \times 10^3$ . The presence of thermal ionization in combustion products was established. There are 21 figures and 6 references.

[Abstracter's note: Complete translation.]

Card 1/1

41831

S/262/62/000/004/003/024

1014/1252

X

INOZEMTSEV, N.E.

Possibility of measuring high gas flow temperatures with the help  
of two contact ionization transducers. Konstr. uglegraf. mat. no.1:  
331-338 '64. (MIRA 17:11)

INOZEMTSEV, N. P.

Open-Hearth Process

Practice of evaporative cooling of open-hearth furnaces. Za ekon. top. 9 no. 6, 1952.

Monthly List of Russian Accessions, Library of Congress, August, 1952. Unclassified.

INOZEMTSEV, N.P.

130-9-1/21

AUTHORS: Inozemtsev, N.P., Sokol, Ya.I., Rysev, I.P., Tarasenko, D.A.,  
and Zamyatin, S.I.

TITLE: Organisation of Production Quality Control (Ob organizatsii  
kontrola kachestva produktsii)

PERIODICAL: Metallurg, 1957, Nr 9,  
pp.1-2 (USSR)

ABSTRACT: This is a contribution to discussions on the present shortcomings and desirable changes in quality control organisation in the Soviet iron and steel industry. The present organisation according to which a special department is responsible for seeing that instructions have been correctly carried out at each stage of the production process is considered harmful since it encourages an irresponsible attitude on the part of the operators and requires a very large control organisation. As an example the number of reports of various types of incorrect procedure at the "Serp i Molot" works are given. A further criticism is that the present organisation is on a shop basis, thus sometimes operating contrary to the interests of the enterprise as a whole. A two-stage reorganisation is recommended: review of the activity of each control worker and preparation for his work to be undertaken by a production worker, the few remaining control workers to be assembled

Card 1/2

POKHVISNEV, A.N.; SHAROV, S.I.; INOZEMTSKY, N.S.

Desulfuration of cast iron in the ladle by liquid blast-furnace  
slag. Stal' 22 no.6487-490 Je '62. (MIRA 16:7)

(Cast iron—Metallurgy)  
(Desulfuration)

ZHELKIN, N.K.; INOZEMTSEV, N.S.; ORLOV, Yu.A.; POKHVISNEV, A.N.;  
SHAROV, S.I.

Processes in the hearth of a powerful blast furnace. Izv. vys.  
ucheb. zav.; chern. met. 7 no.11:34-40 '64. (MIRA 17:12)

1. Moskovskiy institut stali i splavov.

INOZEMTSEV, O. I.

1 Jul 53

USSR/Mathematics - Approximation

"Theory of Best Approximation of Functions of Many Variables by Means of Integral Functions of Finite Degree," O. I. Inozemtsev, Khar'kov Polytech Inst im Lenin

DAN SSSR, Vol 91, No 1, pp 15-18

Considers the space  $C_{\phi}$  of continuous functions  $f(x_1, \dots, x_n)$  for a given weight function  $\phi(x)$  in the special case where the weight functions are bounded in a certain manner by a single-variable function  $a(t)$  such that  $\int_0^\infty \ln a(t) dt / (1+t^2)$  is bounded (i.e. less than infinity). Presented by Acad S. N. Bernshteyn 23 Apr 53.

266T78



INOZENTSEV, O.I.

Theory of the best approximation of functions of several variables  
with the aid of entire functions of a finite power. Ukr. mat. zhur.  
8 no.4:396-412 '56. (MIRA 10:4)  
(Functions of several variables) (Approximate computation)

INOZEMTSEV, O.I.; MARCHENKO, V.A.

Majorants of the zero kind. Usp. mat. nauk 11 no.2:173-178  
Mr-Apr '56.

(Functions, Analytic)

(MLRA 9:8)

16(1)

AUTHOR:

Inozemtsev, O.I.

SOV/41-11-2-4/17

TITLE:

Generalization of the Spherical Modulus of Continuity

PERIODICAL:

Ukrainskiy matematicheskiy zhurnal, 1959, Vol 11, Nr 2,  
pp 155-162 (USSR)

ABSTRACT:

For the continuous function  $\varphi(x_1, \dots, x_n) \geq 1$  ( $-\infty < x_i < \infty$ ) let

$$\int_0^\infty \frac{\ln \alpha(t)}{1+t^2} dt < \infty, \text{ where } \alpha(t) = \sup_{\substack{-\infty < x_i < \infty \\ \xi_1^2 + \dots + \xi_n^2 \leq t^2}} \frac{\varphi(x_1 + \xi_1, \dots, x_n + \xi_n)}{\varphi(x_1, \dots, x_n)},$$

$t \geq 0$ . In the space  $C_\varphi$  of all continuous functions  $f(x_1, \dots, x_n)$  let the norm be defined by

$$\|f\| = \sup_{-\infty < x_i < \infty} \frac{|f(x_1, \dots, x_n)|}{\varphi(x_1, \dots, x_n)} < \infty.$$

As a generalized spherical modulus of continuity for  $f \in C_\varphi$  the author denotes

Card 1/3

Generalization of the Spherical Modulus of Continuity SOV/41-11-2-4/17

$$\omega(\delta; f) = \sup_{\substack{-\infty < x_i < \infty \\ \delta \leq \delta}} \frac{\left| \sum_{i=1}^k p_i \left\{ \frac{1}{S} \int_S f(x_1 + \alpha_1 \xi_1, \dots, x_n + \alpha_n \xi_n) dS - f(x_1, \dots, x_n) \right\} \right|}{\varphi(x_1, \dots, x_n) \omega(\delta)},$$

where  $p_i$  are given real numbers,  $\sum_{i=1}^k p_i \neq 0$ , and  $1 = \alpha_1 < \alpha_2 < \dots < \alpha_k$ ;

$S$  is the surface of the unit sphere  $\xi_1^2 + \dots + \xi_n^2 = 1$ . The properties of the  $\omega(\delta; f)$  depend on the least even number  $2m$  for which

$$\sum_{i=1}^k p_i \alpha_i^{2m} \neq 0.$$

Theorem: If  $\omega(\delta; f) \leq M \delta^r$ , where  $r > 2m$ , then  $f(x_1, \dots, x_n)$  is polyharmonic, i.e.  $\Delta^m f = 0$ . Here  $f(z_1, z_2, \dots, z_n)$  is integral

Card 2/3

Generalization of the Spherical Modulus of Continuity SOV/41-11-2-4/17

and 
$$\lim_{|z_1|^2 + \dots + |z_n|^2 \rightarrow \infty} \frac{\ln |f(z_1, \dots, z_n)|}{\sqrt{|z_1|^2 + \dots + |z_n|^2}} = 0.$$

The author mentions S.N.Bernshteyn, and V.A.Marchenko.  
There are 7 references, 6 of which are Soviet, and 1 American.

SUBMITTED: June 13, 1958 (Khar'kov)

Card 3/3

INOZEMTSEV, O.S.; TSYGANKOVA, L.G.; SHESTOPALOV, V.N.

Transmitting device of a multiple-message remote control system.  
Trudy Inst. elektrotekh. AN URSR 20:175-189 '63.

(MIRA 17:11)

INOZEMTSEV, O.S.

Methods for calculating resistance for a short-term mode of  
operation. Trudy Inst. elektrotekh. AN URSR 20:123-129 '63.  
(MIRA 17:11)

INOZEMTSEV, P. P.

Coal Mines and Mining - Karaganda Basin

Coal miners of Karaganda suitably celebrate Miners' Day in 1952. Ugol', 27, no. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.



INOZEMTSEV, P., nachal'nik.

Innovators of the Karaganda basin. Vest. ugl. 2 no.7:3-4 JI '53.

(MLRA 6:6)

1. Kombinat Karagandaugol'. (Karaganda--Coal mines and mining)

INOZEMTSSEV, P.P., nachal'nik.

Effectiveness of coal piling at the Karaganda coal mines. Mekh.trud.rab.  
7 no.8:9-11 Ag '53. (MIRA 6:8)

1. Kombinat Karagandaugol'. (Karaganda--Coal mines and mining)  
(Coal mines and mining--Karaganda)

KOSHEVIN, V.G., nachal'nik; INOZEMTSKY, P.P., nachal'nik; BELEVTSSEV, T.N., upravlyayushchiy; GARYAZEV, V.V., upravlyayushchiy; GRACHEV, L.I., upravlyayushchiy; KONOVALOV, G.I., upravlyayushchiy; GILLER, A.I., nachal'nik; GUBIN, N.I., glavnyy inzhener.

The Soviet miners honor Miners' Day with new industrial victories.

Ugol' 28 no.8:5-15 Ag '53.

(MLRA 6:?)

1. Kombinat Kuzbassugol' (for Koshevin). 2. Kombinat Karagandaugol' (for Inozemtsev). 3. Trest Stalinugol' (for Belevtsev). 4. Trest Kalinugol' (for Gryazev). 5. Trest Molotovugol' (for Grachev). 6. Trest Shchekinugol' (for Kononov). 7. Shakhtoupravlenie No.9/12 tresta Shchekinugol' (for Giller). 8. Shakhta No.34 tresta Krasnoarmeyskugol' (for Gubin).  
(Coal mines and mining)

INOZEMTSEV, P.P.

Increasing labor productivity. Mekh.trud.rab. 8 no.6:9-11 Ag-S '54.  
(MLRA 7:9)

1. Nachal'nik kombinata Karagandaugol'.  
(Coal mines and mining)

**INOZEMTSKY, P.P.**

What is slowing down the labor productivity and mechanization of work in Karaganda mines. Mekh. trud. rab. 9 no.11:21 N '55.

(MLRA 9:2)

1. Nacha. 'nik kombinata Karagandaugel'.

(Karaganda--Coal mines and mining)

INOZEMTSSEV, Pavel Petrovich; POLOZHIY, Fedor Mikhaylovich; SHNAYDMAN,  
MAKS IONOVICH; CHERKASSKIY, Feliks Borisovich, LYUBOSHECHINSKIY,  
Dmitriy Markovich; POZIN, Yevgeniy Zalomanovich; LEVIN, N.F.,  
otvetstvennyy redaktor; KOLOMIYTSSEV, A.D., redaktor izdatel'stva;  
KOROVENKOVA, Z.A., tekhnicheskiy redaktor

[Mechanization of coal loading in mines of the Karaganda Basin]  
Mekhanizatsiya havalki uglia na shakhtakh Karagandinskogo ugol'-  
nogo basseina. Moskva, Ugletekhnizdat, 1956. 171 p. (MIRA 9:9)  
(Karaganda Basin--Coal mining machinery)

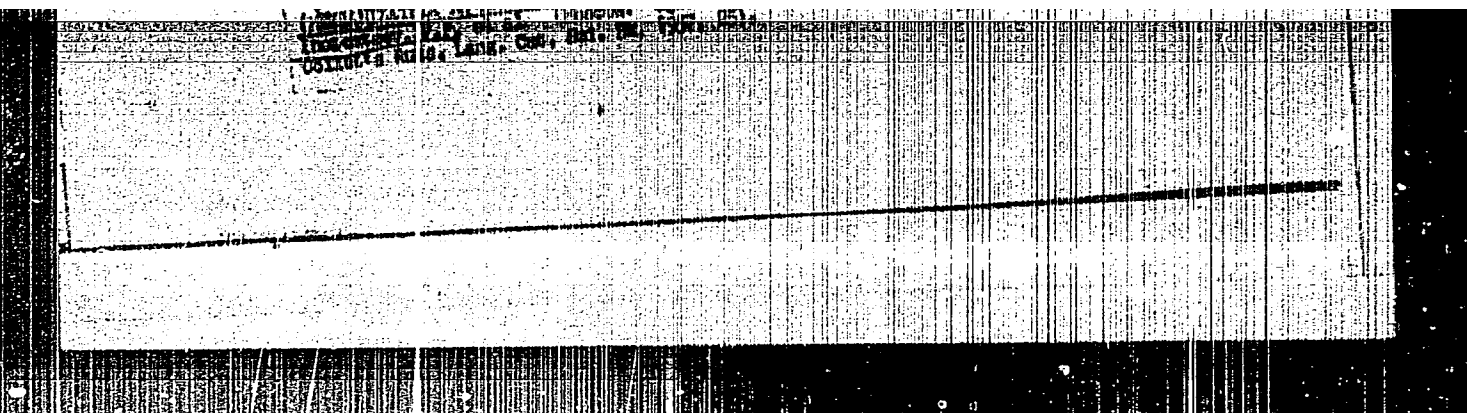
*Literatura P. (172)*

INOZEN TSEV, P. P.

100%  
REPRODUCTION OF LOADING OF COAL IN KARAGANDA MINE  
A. INOZEN TSEV, P. P. KARAGANDA MINE  
P. P. of 81 KARAGANDA MINE, 1957, 251.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618620001-7



APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618620001-7"



INOZEMISEV, S. N.

Dvigatel' GAZ-MK dlia kombaina. Izd. 2., stereotipnoe. Moskva,  
Sel'khozgiz, 1949. 94 p. illus.

GAZ-MK engine for a combine.

DLC: Tj1486.16 1949

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of  
Congress, 1953.

INOZEMTSEV, S.N.; VAVILOV, Ya.I.; DUL'NEV, V.P., tekhnicheskii redaktor

[Catalog of spare parts for the GAZ-51 automobile] Katalog  
zapasnykh chastei avtomobilia GAZ-51. Izd. 2-oe, ispr. Moskva,  
Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1951. 295 p.  
[Microfilm] (MIRA 10:2)

1. Gor'kovskiy avtomobil'nyy zavod imeni Molotova, Gorki.  
(Automobiles--Apparatus and supplies)

ZISLIN, S.G.: INOZEMTSEV, S.N.

Drafting standards do not come up to the requirements of the automobile industry. Avt.trakt.pron.no.5:3-6 My '53. (MLRA 6:5)

1. Gor'kovskiy avtozavod im.Molotova. (Automobile engineering--Standards)

INOZEMTSEV, S. P.

PA L/L9T29

USSR/Electricity

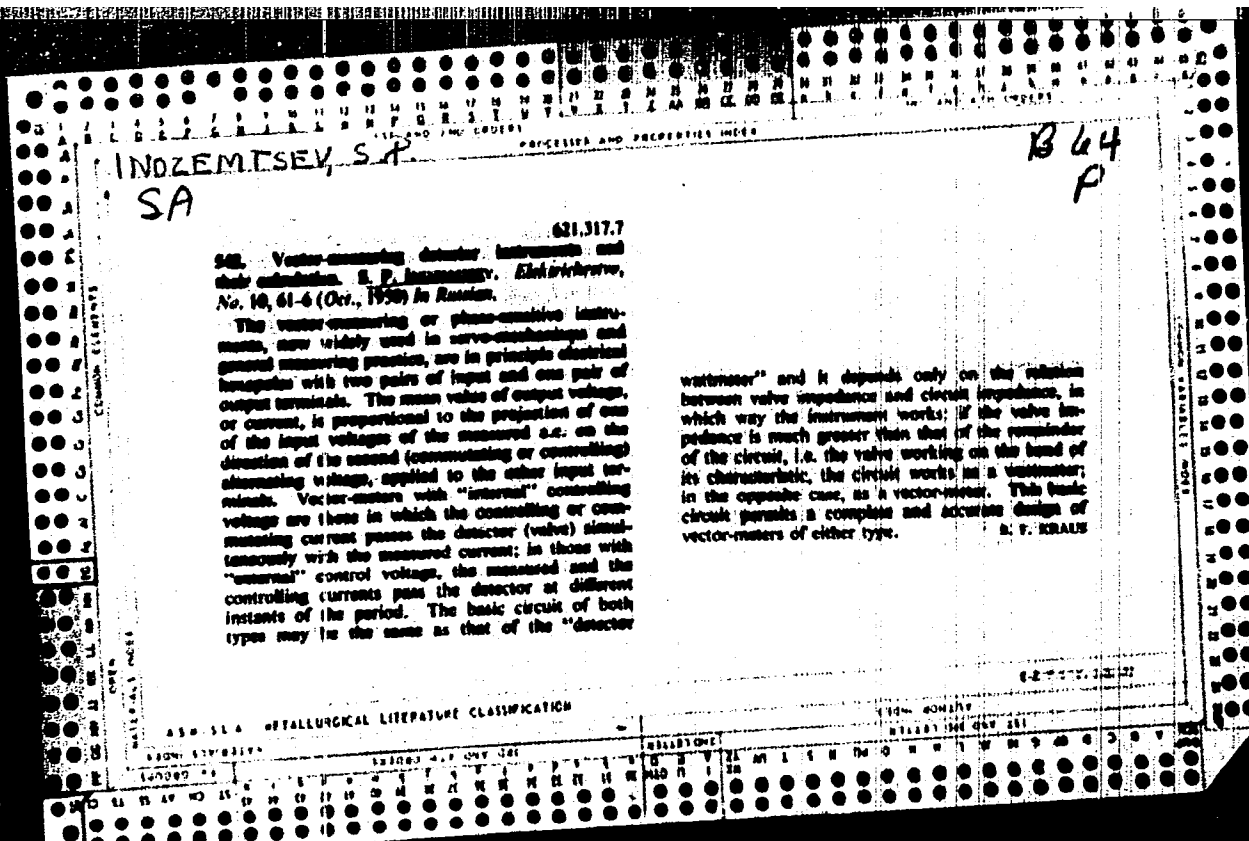
Jan 48

"The Oldest Czechoslovakian Electrical Journal,  
'Elektrotechnicky Obsor' (Electrical Engineering  
Outline)," B. N. Tarayev, Cand Tech Sci, S. P.  
Inozemtsev, Engr, 1 p

"Elektrichestvo" No 1

Compliments subject journal for the high-level  
technical information which it has consistently con-  
tained.

1/4/48



INOZEMTSOV, S.P., kandidat tekhnicheskikh nauk.

Eliminating phase and amplitude changes in output voltage and  
current of a four-terminal network during small variations of  
frequency. Trudy MAI no.66:35-41 '56. (MLBA 9:11)  
(Electric networks)

INOZEMTSEV, S.P., kandidat tekhnicheskikh nauk; ISTRATOV V.N., kandidat tekhnicheskikh nauk; KAMENSKIY, A.V., inzhener.

Automatic frequency control of airplane a.c. generators operating  
in parallel. Trudy MAI no.66:69-73 '56. (MLRA 9:11)  
(Electric generators)  
(Airplanes--Electric equipment)

KOLOSOV, Sergey Petrovich; SOTSKOV, B.S., prof., doktor tekhn. nauk, retsenzent; KRASOVSKIY, A.A., prof., doktor tekhn. nauk, retsenzent; INOZETSKY, S.P., dots., kand. tekhn. nauk, red.; LOSEVA, G.F., red. izd-va; ROZHIN, V.P., tekhn. red.

[Elements of automatic equipment for aviation] Elementy aviatsionnykh avtomaticheskikh ustroystv. Moskva, Gos. izd-vo obor. promyshl., 1958.  
382 p. (MIRA 11:9)

(Airplanes—Equipment and supplies)



KRYLOV, Viktor Aleksandrovich; SOLOVEY, Agniya Petrovna; ANISIMOV, M.G.,  
inzh., retsenzenty INOZEMTSEV, S.P., kand. tekhn. nauk, red. BE-  
LEVTSEVA, A.G., fed. izd-va; SECHERBAKOV, P.V., tekhn. red.

[Safety engineering in work on systems containing high-  
frequency and superhigh-frequency power generators] Bezopasnost'  
truda pri rabote na ustanovkakh s generatorami energii vysokikh  
i sverkhvysokikh chastot. Moskva, Gos. nauchno-tekhn. izd-vo  
Oborong., 1961. 61. (MIRA 14:6)  
(Radio, Shortwave—Safety measures)

NECHAYEV, Georgiy Kuz'mich; UDALOV, Nikolay Petrovich; INOZEMTSEV, S.P.,  
red.; BORUNOV, N.I., tekhn. red.

[Relays and transducers using semiconductor thermistors] Relé i  
datchiki s poluprovodnikovymi termosoprotivleniyami. Moskva,  
Gos. energ. izd-vo, 1961. 108 p. (Biblioteka po avtomatike, no.29)  
(MIRA 14:7)

(Transducers)

(Electric relays)

BERTINOV, Al'bert Iosifovich; NAGORSKIY, V.D., doktor tekhn. nauk, prof.,  
retsenzent; ZAVALISHIN, D.A., doktor tekhn. nauk, prof., retsenzent;  
INOZEMTSEY, S.P., kand. tekhn. nauk, red.; BELEVITSEVA, A.G., red.  
izd-va; SHCHERBAKOV, P.V., tekhn. red.

[Electric machinery in aeronautical automatic control systems]  
Elektricheskie mashiny aviatsionnoi avtomatiki. Moskva, Gos.  
nauchno-tekhn. izd-vo Oborongiz, 1961. 426 p. (MIRA 14:9)

1. Chlen-korrespondent AN SSSR (for Zavalishin).  
(Electronics in aeronautics) (Airplanes--Electric equipment)

S/204/62/002/004/018/019  
E075/E435

AUTHORS: Beer, A.A., Zagorets, P.A., Inozemtsev, V.F.,  
Povkh, G.S., Popov, A.I.

TITLE: Radio-chemical telomerization of olefines

PERIODICAL: Neftekhimiya, v.2, no.4, 1962, 617-623

TEXT: Additional data are presented on the telomerization between ethylene and carbon tetrachloride, and the reaction between tetrafluoroethylene and isopropylalcohol. The experiments were conducted in a thermostatically controlled autoclave at 16 to 100 atm pressure in the absence of oxygen. The ethylene -  $\text{CCl}_4$  mixture was irradiated with  $\gamma$ -rays from  $\text{Co}^{60}$  with the activity of about 350 g/equiv radium. The activity of the source for the  $\text{C}_2\text{H}_2\text{F}_4$  - alcohol mixture was 120 g/equiv radium. The molar ratio  $\text{C}_2\text{H}_4$  -  $\text{CCl}_4$  was varied from 0.2:1 to 3.8:1 and the reaction was studied at 20, 50 and 100°C. It was established that the content of individual telomers in the reaction product is given by the following approximate equations

$$F_1 = \frac{C_1 R}{C_1 R + 1}; F_2 = \frac{C_2 R}{(C_1 R + 1)(C_2 R + 1)}; F_3 = \frac{C_3 R}{(C_1 R + 1)(C_2 R + 1)(C_3 R + 1)}$$

Card 1/2

etc.

Radi-chemical telomerization ...

S/204/62/002/004/018/019  
E075/E435

where  $F_n$  is the molar proportion of telomer with  $n$  olefine residues,  $C_n$  - the chain transfer constant for the radical leading to the formation of telomer with  $n$  olefine residues and  $R$  - the molar ratio of telogen to olefine in the reaction mixture. When the ratio is changed from 3.8:1 to 0.2:1, a marked increase in the yield of tetrachloropropane is observed (from 3 to 5% to 63 to 100°C). The results were used in the development of radio-chemical plant with an output of 8 kg/hour of tetrachloroalkanes with Co source activity of about 15000 g/equiv radium in a reactor of 0.5 m<sup>3</sup> volume and 800 mm in diameter. Telomerization between C<sub>2</sub>H<sub>2</sub>F<sub>4</sub> and lower alcohols was studied at room temperature. The radio-chemical yield decreases in the series propanol-2 > butanol-1 > ethanol > butanol-2 > methanol. The reaction conditions were selected so as to eliminate completely the formation of high molecular weight compounds. There are 4 figures and 2 tables.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut  
im. Mendeleyeva (Moscow Institute of Chemical  
Technology imeni Mendeleyev)

Card 2/2

USPENSKIY, V.K., kand.tekhn.nauk; INOZEMTSEV, V.G., inzh.

Increasing the controllability of automatic brakes used on long  
trains. Zhel. dor. transp. 40 no.6:77-79 Je '58. (MIRA 11:6)  
(Railroads--Brakes)

SOKOLOV, B.A., kand.tekhn.nauk; INOZEMTSEV, V.G., inzh.; RASTORGUYEV, V.P.,  
tekhnik

Steady movement of air with a variable discharge in the main air  
line of an automatic braking system. Trudy TSNII MPS no.163:169-  
191 '58. (MIRA 12:2)

(Railroads--Brakes)

(Air flow)

INOZEMTSEV, V.O., inzh.

Flexibility of air distributors. Trudy TSNII MPS no.163:192-  
194 '58. (MIRA 12:2)  
(Railroads--Brakes) (Air pipes)



INOZEMTSEV, V. G.: Master Tech Sci (diss) -- "Investigation of braking processes, and recommendations for increasing the control of automotive braking processes". Moscow, 1959. 17 pp (Min Transportation USSR, All-Union Sci Res Inst of Railroad Transport), 150 copies (KL, No 9, 1959, 115)

INOZEMTSEV, V.G., insh.

Brake equipment of series F a.c. electric locomotives. Elek.1  
topl.tiaga 14 no.3:41-43 Mr '60. (MIRA 13:7)  
(Electric locomotives--Equipment and supplies)

KAZARINOV, V.M., doktor tekhn.nauk, prof.; INOZEMTSSEV, V.G., kand.tekhn.  
nauk

Automatic brakes of series F electric locomotive. Vest.TSNII  
MPS 19 no.6:26-29 '60. (MIRA 13:9)  
(Electric locomotives--Brakes)

INOZEMTSEV, V.G., insh.; KASHCHETEV, N.T., insh.

Increasing the operational reliability of automatic brakes. Zhel.  
dor.transp. 42 no.11:27-30 N '60. (MIRA 13:11)  
(Railroads--Brakes)

KAZARINOV, V.M., doktor tekhn.nauk, prof.; INOZEMTSEV, V.O., kand.tekhn.nauk

Further improvement in designing braking systems for railroad rolling  
stock. Vest.TSNII MPS. 20 no.3:34-37 '61. (MIRA 14:5)  
(Railroads--Brakes)

36566

S/081/62/000/006/112/117  
B110/B101

15.9201

AUTHORS: Vinit'skiy, L. Ye., Inozentsev, V. G., Prokof'yeva, V. L.

TITLE: Cold-resistant rubbers made from synthetic Soviet caoutchoucs for the bladders of automobile brake systems

PERIODICAL: Reiterativnyy zhurnal. Khimiya, no. 6, 1962, 695, abstract 6P583 (Tr. Vses. n.-i. in-ta zh.-d. transp., no. 212, 1961, 157 - 163)

TEXT: Rubbers made from SKN-18 (SKN-18) and SKS-10 (SKS-10) and combinations of these were tested between -60° and 50° C for cold and oil resistance. They all had a higher coefficient of cold resistance than the polychloropren caoutchouc rubbers previously used for bladders. Bladders made from SKS-10 had about the same flexure at -70° C as at 20° C. Rubbers made from SKN-18 had poorer flexibility at low temperatures, but better oil resistance. The properties of rubbers made of an SKS-10/SKN-18 combination were intermediate, combining good resistance to cold and to oil. [Abstracter's note: Complete translation.]

Card 1/1

GRINIO, Vyacheslav Adol'fovich; KRYLOV, Vladimir Ivanovich; OZOLIN,  
Aleksandr Karlovich; INOZEMTSEV, V.G., kand. tekhn.nauk,  
red.; VOROTNIKOVA, L.F., tekhn. red.

[Engineer's valves] Krany mashinista. Izd.2., dop. Moskva,  
Transzheldorizdat, 1962. 74 p. (MIRA 15:11)  
(Locomotives—Valve-gears)

INOZEMTSEV, V.C., kand.tekhn.nauk

Brake calculations taking the train length into account. Vest.  
TSNII MPS 22 no.5:37-39 '63. (MIRA 16:8)  
(Railroads—Brakes)



VINITSKIY, L.Ye., kand.tekhn.nauk; INOZEMTSEV, V.G., kand.tekhn.nauk;  
PROKOF'YEVA, V.L., inzh.

Elastic rubber packing for brake equipment. Vest. TSNII MPS  
23 no.1:11-13 '64. (MIRA 17:4)

INOZEMTSEV, V.G., kand. tekhn. nauk

Selecting the parameters of electro-pneumatic brakes. Vest.  
TSNII MPS 23 no.4:15-19 '64. (MIRA 17:8)

INOZEMTSEV, V.G., kand. tekhn. nauk; SERAFIMOVICH, V.S., kand. tekhn. nauk

Efficiency of braking when using the automatic provisory No.536  
regulator. Vest. TSNII MPS 24 no.8:14-16 '65.

(MIRA 19:1)

SOV/121-58-10-4/25

AUTHOR: Vinogradov, B.P.,  
Inozemtsev, V.I.

TITLE: Hydraulic Presses for the Manufacture of Electrically  
Welded High Pressure Tubes (Gidravlicheskiye pressy  
dlya izgotovleniya elektrosvarnykh trub vysokogo  
davleniya)

PERIODICAL: Stanki i Instrument, 1958, Nr 10, pp 15-17 (USSR)

ABSTRACT: The welded steel tube production line of the  
Chelyabinsk Tube Rolling Mill (Chelyabinskiy  
truboprokatnyy zavod) is based on a newly developed  
technique of bending the tube from strip in 12 m  
lengths. The cut strip is first bent into a shallow  
channel with rounded flanges. Then the channel is  
folded to produce an oval section with flat sides  
which is subsequently formed into a round slotted  
tube. The edges are brought together for welding, after  
which the tube is calibrated by expansion, straightened,  
heat-treated and tested. The bending operations are  
carried out on standardized hydraulic presses after  
planing and bevelling the edges of the strip. The

Card 1/2

SOV/121-58-10-4/25

Hydraulic Presses for the Manufacture of Electrically Welded  
High Pressure Tubes

design and working of the presses are described in detail, with special emphasis on a new calibrating, straightening testing machine. The tubes are expanded to size by cold work through internal pressure. The machine is largely automatic and handles seventeen tubes per hour of 720 mm diameter. All the presses were designed by the Central Design Office for Press Forming Machinery (Tsentral'noye proyektno-konstruktorskoye byuro kuznechno-pressovogo mashinostroyeniya) and manufactured by the Kolomna Heavy Machine Tool Works (Kolomenskiy Zavod tyazhelogo stankostroyeniya). There are 4 illustrations including 3 photos.

Card 2/2

INOZEMTSEV, V.F.

SHABALIN, A.Ye., inzh.; INOZEMTSEV, V.F.; ANTONOV, L.I.

Concerning the textbook "Safety engineering and fire prevention in the paper industry" by V.F. Maksimov. Reviewed by A.Ye. Shabalin, V.F. Inozemtsev, L.I. Antonov. Bus. prom. 33 no.2:30-31 F '58.

(MIRA 11:3)

1. Tekhnicheskiy inspektor Leningradskogo oblprofsoвета (for Inozemtsev). 2. Inzhener po tekhnike bezopasnosti Svetogorskogo tsellyulozno-bumazhnogo kombinata (for Antonov).

(Paper industry--Safety measures)  
(Factories--Fires and fire prevention)  
(Maksimov, V.F.)

1. FOMENKO, A.N., INOZEMTSEV, Ye K.
2. USSR (600)
4. Lignite - Bolgrad District
7. Geological report on the results of the prospecting carried by the Izmail and Kagul Lignite parties in 1940-1941 (Abstract) Izv.Glav.upr.geol.fon. no.2 1947
9. Monthly List of Russian Accessions. Library of Congress. March 1953. Unclassified.

INOZEMTSEV, Yu. (UH8DA) (Ashkhabad)

Work on SSB is very beneficial. Radio no.2:28 F '62.

(Radio operators) (Amateur radio stations)

(MIRA 15:1)



INOZEMTSEV, Yu.A.; HAZYROV, G.A.; MOLLAKOV, V.

Radio observations of the Orienids in Ashkhabad in 1956. Izv. AN  
Turk. SSR no.5:108-109 '58. (MIRA 11:12)

1. Institut fiziki i geofiziki AN Turkmeneskey SSR.  
(Ashkhabad—Radio astronomy) (Meteors)

INOZEMTSEV, Yu. (RHBABC), master radiolyubitel'skogo sporta (Ashkhabad).

New frequency bands bring out new requirements. Radio no.3:15  
Mr '60. (MIRA 13:6)

(Radio, Shortwave)

BELOUS, A.T.; SAVRUKHIN, A.P.; INOZEMTSEV, Yu.A.

Radar observations of the Geminid meteor shower in 1958. Izv. AN Turk.  
SSR. Ser. fiz.-tekh., khim, i geol. nauk no. 3:23-27 '61. (MIRA 14:7)

1. Fiziko-tekhnicheskiy institut AN Turkmenskoy SSR.  
(Meteors) (Radar in astronomy)

3.1220  
3.1230  
3.1710

AUTHORS:

TITLE:

SOURCE:

TEXT:

SSR (Astrophysics Laboratory IFG AS Turk.SSR) has carried out systematic studies of meteors during the IGY with a view to obtaining observational material under the following three main headings: 1) meteor activity as an ionizing factor in the atmosphere; 2) determination of the density and height of the homogeneous atmosphere; 3) determination of meteor-trail drift in the upper atmosphere from observations of wind distribution. The observations were carried out visually (with and without telescopes), photographically and by radar. In addition, there were spectral observations of meteors and telescopic observations

Card 1/3

43288  
S/031/62/000/008/009/016  
EO32/E514

Belous, A.T., Gul'medov, Kh.D., Inozemtsev, Yu.A.,  
Lyubarskiy, K.A., Kalyakina, M.I. and Sadykov, Ya.F.

Meteor observations at Ashkhabade

Ionosfernyye issledovaniya (meteory). Sbornik  
statey, no.8. V razdel programmy MGG (ionosfera).  
Mezhdoved. geofiz. kom. AN SSSR. Moscow, Izd-vo AN  
SSSR, 1962, 64-68

The Astrofizicheskaya laboratoriya IFG AN Turkmenskoy

standard  
frequency of  
The mean point  
above the horizon, facing  
16 months of the IGY, 6216 radio